Job Hazard Analysis (J.H.A) and documentation PART TWO Examples/ Beispiele

Gefährdungsbeurteilung und Dokumentation

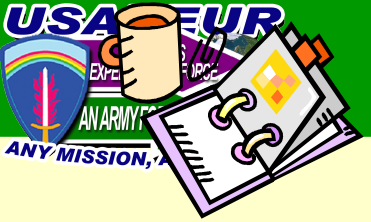
Wolfgang Rieth, USAREUR Safety Office

Maureen Pikal IMA-E Safety Office

Job Hazard Analysis (J.H.A.)

We perform mental JHA everyday!

Job Hazard Analysis (J.H.A.)



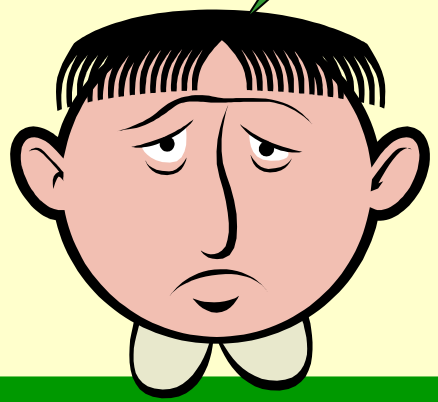
Can you make me a pot of coffee

WHY!!?*% $@

Because I want to be able to make you **MORE** than one coffee!

Look at this

NOT AT ALL!! Guess we need to make a J.H.A. first



Job Hazard Analysis (J.H.A.)

Job Hazard Analysis (J.H.A.)

J.H.A. for making coffee/ *Gefaehrdungsbeurteilung der Taetigkeit "Kaffe kochen"*

Look at….

Work Place Work Environment:

Materials

Equipment

Operation/process

Occupations/Personnel

Workers capabilities /needs

Job Hazard Analysis (J.H.A.)

- Work Place/Work Environment
  e.g. Space, Illumination
- Materials: e.g Milk, coffee, sugar
- Equipment:
  Electricity, Technical inspections, Equipment Parts, coffee pot
- Operation/process: Job tasks; filling water reservoir, filling coffee filter, turning on coffee pot
- Workers capabilities /needs:
  Adequate reach to all materials and equipment
  Can lift equipment
  Any allergies to coffee, sugar or milk

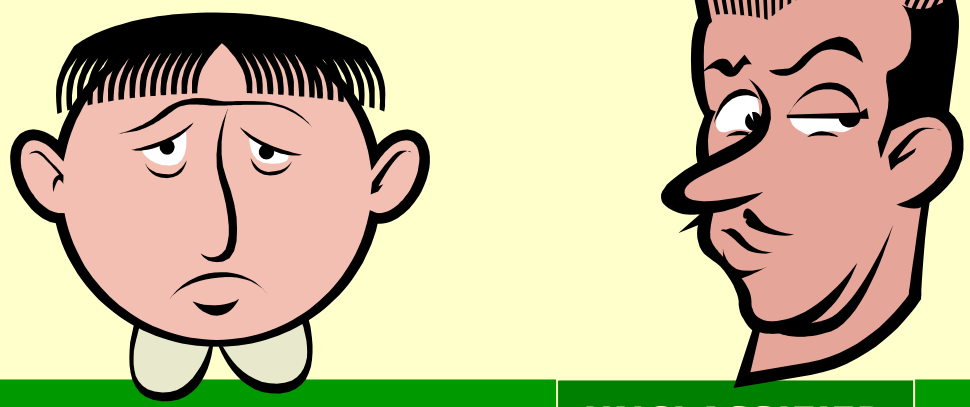
Job Hazard Analysis (J.H.A.)

Catagory /Job Task	Questions to ask / *Prueffragen*	Y	N	Hazards	Measures / Massnahmen	Action by / *zu erledigen von*	Until / *bis*
Work Environment/Workplace	*Is illumination sufficient for the work place?*	**Y**					
	Is the workplace sufficient in height, space?		**N**	**Coffee machine may fell from height while being used**	**Relocate Coffee machine to new space (top of Refrigerator)**		
Electrical	Are connecters /plugs in proper conditions (No exposed wire)		**N**	**Broken plug on coffee pot**	**Replace broken plug**		
	Are electrical cords bundled and secured out of the way of the operation		**N**	**Coffee pot can be pulled off shelf, spilling hot liquids**	**Neatly bundle and/or secure cords out of the way.**		

Job Hazard Analysis (J.H.A.)

AFTER … J.H.A

Job Hazard Analysis (J.H.A.)



Job Hazard Analysis (J.H.A.)

Example on how to perform J.H.A. for a Maintenance Activity

Beispiel einer Gefaehrdungsbeurteilung fuer eine Instandsetzungs Einheit

How to approach? / *Vorgehensweise*

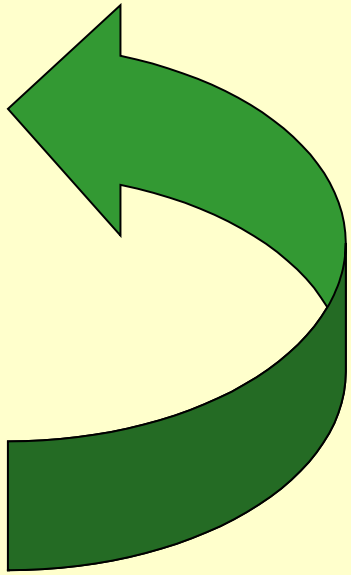
Preparation
Vorbereitung

Execution
Durchführung

Development/Determination of Action *Maßnahmenentwicklung*

Evaluation

Documentation
Dokumentation



Aus „Arbeit und Ökologie“ 5/2003

Job Hazard Analysis (J.H.A.)

Preparation
Vorbereitung

Think about

Activity breakdown by… work areas, job series, hazard categories, special needs etc.

Occupation	Operation	Work Areas	Personal

Job Hazard Analysis (J.H.A)

Preparation
Vorbereitung

Example/ Beispiel

Direct Support Maintenance Activity

Occupation / Personnel

45 Employees

1 Handicapped (Wheelchair, Office Clerk) (GS-XX)

4 Storekeepers (WG XX)

21 Automotive Mechanic (WG YY)

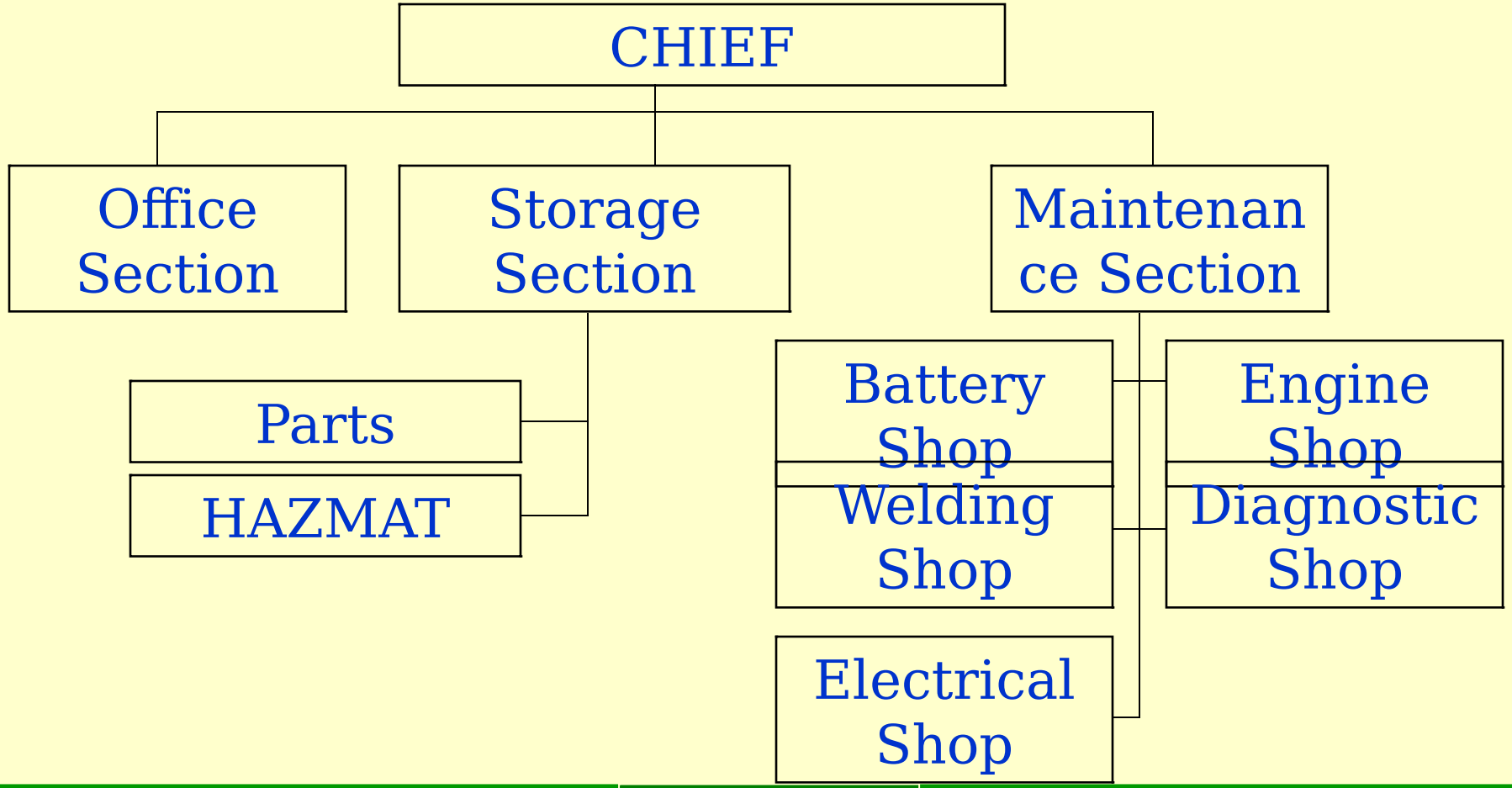
1 Pregnant Female (Automotive Mechanic)

3 Vehicle Electrician (WG ZZ)

Job Hazard Analysis (J.H.A.)

Preparation
Vorbereitung

TYPICAL MAINT ACTIVITY SHOPS



Job Hazard Analysis (J.H.A.)

Storage Section

Parts

HAZMAT

General Workplace Items

Illumination

Ventilation (depending on type of transportation equipment used

Temperature

Electrical (facility)

Space

Transport patterns and marking etc.

Shelves and access to shelves

Shipping receiving Line Ergonomic

Job Hazard Analysis (J.H.A.)

Storage Section

Parts

HAZMAT

Specific Storage Requirements

Electrical Systems E.g. explosion-proof (IP)

Emergency devises e.g. Eye wash , shower

Decontamination Materials

Sign, labels, special containments,

MSDS

Emergency Plan and numbers

Etc.etc.etc…

Job Hazard Analysis (J.H.A.)

Storage Section

Parts

HAZMAT

Operation

Recieving HAZMAT for storage

Breaking down the HAZMAT material to issue size (box containes 4 gallons in 1 gallon containers)

Place HAZMAT on shelf

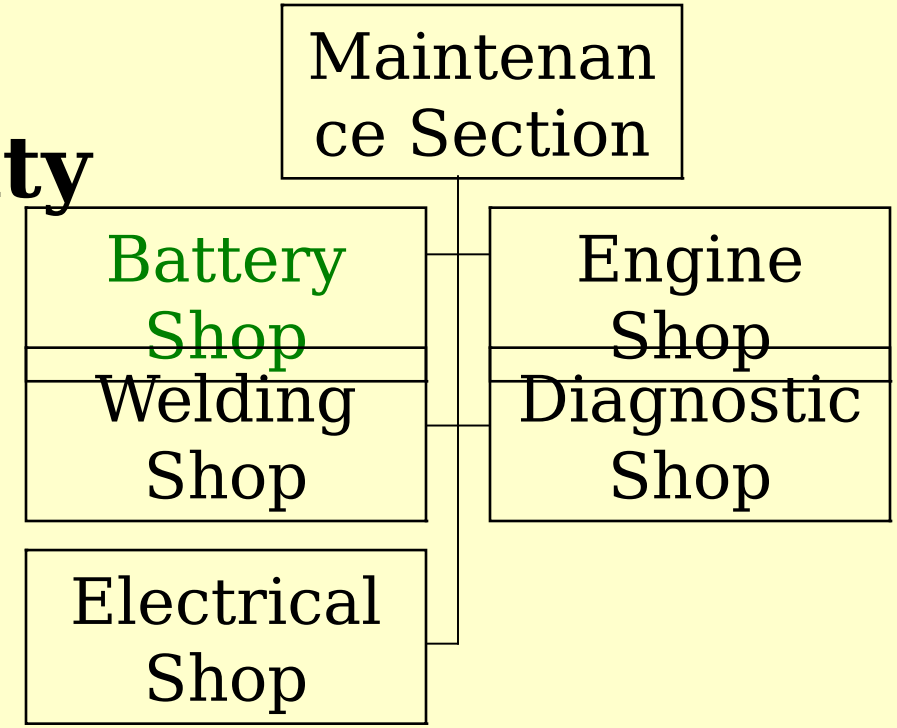
Issue HAZMAT to Customer

Administration work: inventory of HAZMAT recieved and issued.

Job Hazard Analysis (J.H.A.)

Preparation
Vorbereitung

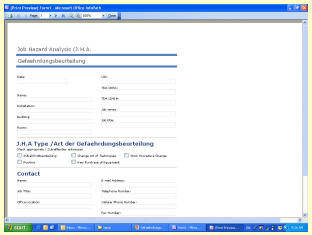
JHA
Maintenance **Activity**
Battery Shop
by **Operation**

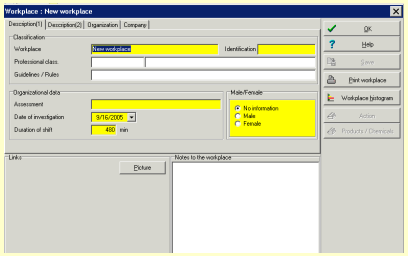


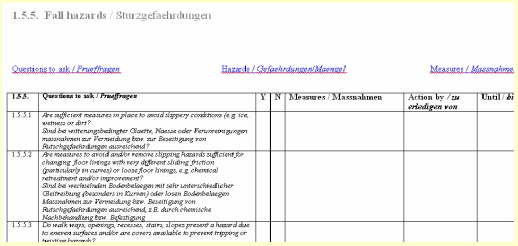
Job Hazard Analysis (J.H.A.)

Preparation
Vorbereitung

Which tool to use to perform/document J.H.A.
e.g OSHA 3071, BDS, J.H.A. Info path form or checklist provided on CD, Handlungshilfe

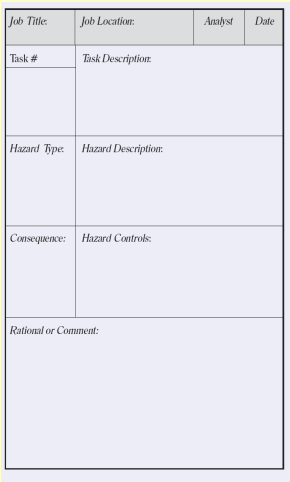





1.5.5. Fall hazards / Sturzgefahrdungen

Questions to ask / Pruelfragen | Hazards / Gefaehrdungen/Maengel | Measures / Massnahmen

1.5.5.	Questions to ask / Pruelfragen	Y	N	Measures / Massnahmen	Action by / zu erledigen von	Until / Bi
1.5.5.1	Are sufficient measures in place to avoid slippery conditions (e.g. ice, wetness or dirt? Sind bei witterungsbedingter Glaette, Nasse oder Verunreinigungen massnahmen zur Vermeidung bzw. zur Beseitigung von Rutschgefaehrdungen ausreichend ?					
1.5.5.2	Are measures to avoid and/or remove slipping hazards sufficient for changing floor linings with very different sliding friction (particularly in curves) or loose floor linings, e.g. chemical retreatment and/or improvement? Sind bei wechselnden Bodenbelaegen mit sehr unterschiedlicher Gleitreibung (besonders in Kurven) oder losen Bodenbelaegen Massnahmen zur Vermeidung bzw. Beseitigung von Rutschgefaehrdungen ausreichend, z.B. durch chemische Nachbehandlung bzw. Beseitigung					
1.5.5.3	Do walk ways, openings, recesses, stairs, slopes present a hazard due to uneven surfaces and/or are covers unsuitable to prevent tripping or					



Job Title:	Job Location:	Analyst	Date
Task #	Task Description:		
Hazard Type:	Hazard Description:		
Consequence:	Hazard Controls:		
Rational or Comment:			

Job Hazard Analysis (J.H.A.)

Job Hazard Analysis (J.H.A.)

Gefaehrdungsbeurteilung

Date:

Name:

Installation:

Building:

Room:

UIC:

TDA PARA:

TDA LINE#:

Job series:

Job title:

J.H.A Type / Art der Gefaehrdungsbeurteilung

Check appropriate / Zutreffendes ankreuzen

- ☐ Initial/Erstbeurteilung
- ☐ Routine
- ☐ Change Art of Techniques
- ☐ New Purchase of Equipment
- ☐ Work Procedure Change

Contact

Name:

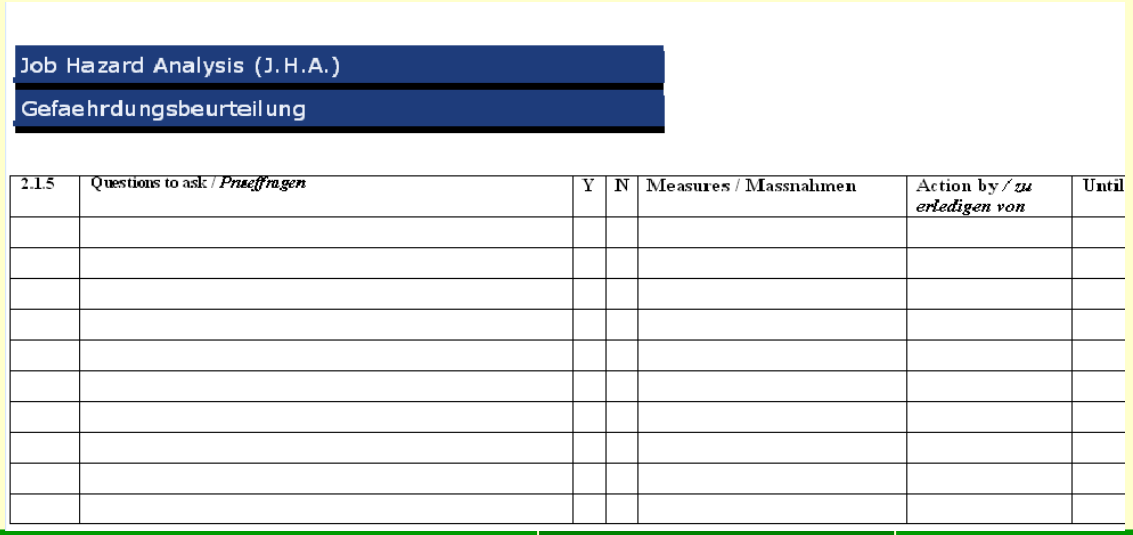
Job Title:

Office Location:

E-mail Address:

Telephone Number:

Fax Number:



Job Hazard Analysis (J.H.A.)

Gefaehrdungsbeurteilung

2.1.5	Questions to ask / *Prueffragen*	Y	N	Measures / Massnahmen	Action by / *zu erledigen von*	Until

Job Hazard Analysis

Job Hazard Analysis (JHA) Page __ of __

Name of Person Completing JHA _____ Job Title: _____ Phone Number: _____ Email: _____

Date	UIC
Name	TDA PARA:
Installation	TDA LINE#:
Building	Job Series
Room	Job Title

JHA Type: Check appropriate box	
☐	Initial
☐	Routine
☐	Change Art of Technology
☐	New purchase of Equipment
☐	Work Procedure Change

Category/ Job Task	Questions to Ask/Pruffragen	Y	N	Hazards	Measures/Massnahmen	Action by/ zu erledigen von	Until /bis

Job Hazard Analysis (J.H.A.)

Execution
Durchführung

***Required* Administrative Information (regardless of the tool/form you chose to use)**

Date:* 16.Sep 2005

Name: Maureen Pikal

Installation:
MHTV

Building:
3754

Room:
112

UIC:*
W6BJAA

TDA PARA:*
001A

TDA LINE#:*
08

Job series:
0018

Job title:Safety and Occupational Health Specialist

Job Hazard Analysis (J.H.A.)

Execution
Durchführung

The person who completed the JHA

Contact

Name:

Maureen Pikal

Job Title:

Safety and Occupational Health Specialist

Office Location: MHTV, Bldg 3752, room 112

E-mail Address:

Maureen.pikal@ima-e.army.mil

Telephone Number:

DSN 370-6555

Fax Number:

DSN 370-6555

Job Hazard Analysis (J.H.A.)

Execution
Durchführung

J.H.A Type /Art der Gefaehrdungsbeurteilung*

Check appropriate / Zutreffendes ankreuzen

- [X] Initial/Erstbeurteilug
- [ ] Change Art of Technology
- [ ] Work Procedure Change
- [ ] Routine
- [ ] New Purchase of Equipment

Job Hazard Analysis (J.H.A.)

Execution
Durchführung

Assessment

Define Hazards

Verify Regulatory and Statatory Requirements

Define Corrective action

Job Hazard Analysis (J.H.A.)

Execution
Durchführung

Catagory /Job Task	Questions to ask / *Prueffragen*	Y	N	Hazards	Measures / Massnahmen	Action by / *zu erledigen von*	Until / *bis*

Job Hazard Analysis (J.H.A.)

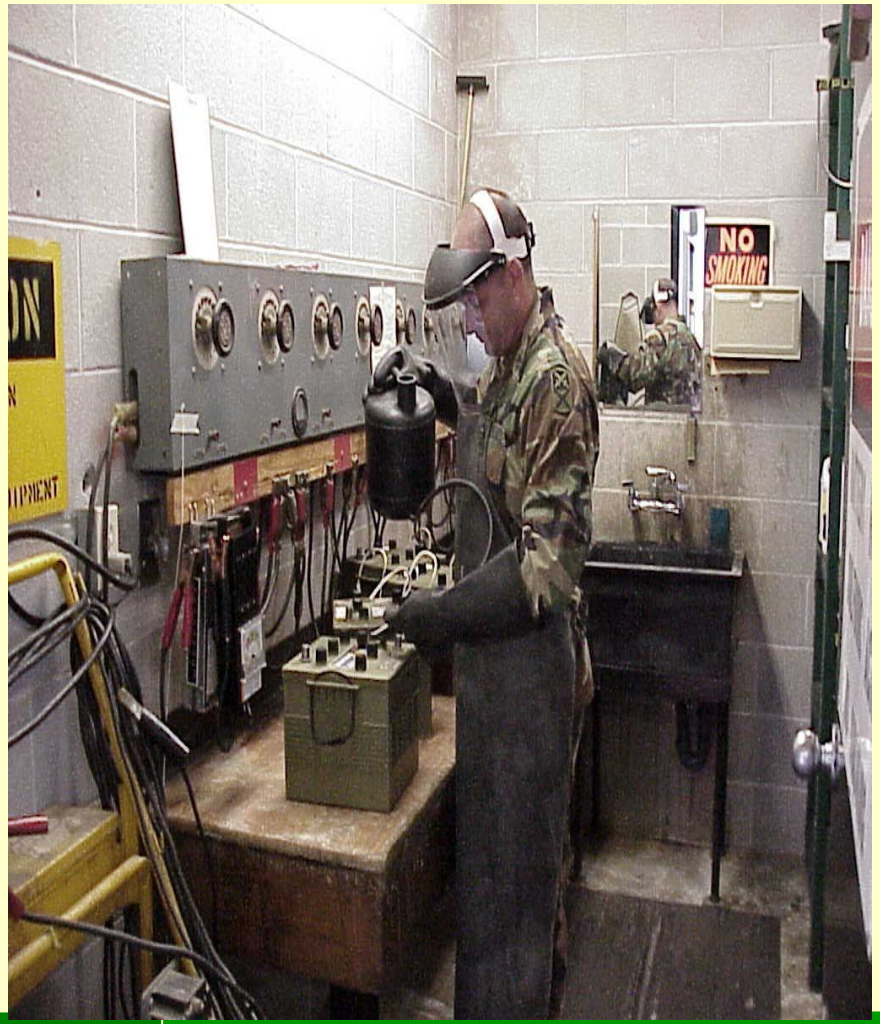
Execution
Durchführung

Catagory /Job Task

Job Hazard Analysis (J.H.A.)

Execution
Durchführung

Catagory /Job Task
Receiving Batteries (includes storage)
Draining Batteries
Filling Batteries
Charging Batteries
Issuing serviced/filled batteries (includes Storage
Administrative Requirements



Job Hazard Analysis (J.H.A.)

Execution
Durchführung

Catagory /Job Task

- Receiving Batteries (includes storage)
- Draining Batteries
- Filling Batteries
- Charging Batteries
- Issuing serviced/filled batteries (includes Storage
- Administrative Requirements

Category/ Job Task	Questions to Ask/Pruffragen	Y	N	Hazards	Measures/ Massnahmen	Action by/ zu erledigen von	Until/bis
Receiving Batteries (includes storage)							
Draining Batteries							
Charging Batteries							
Issuing serviced/filled batteries (includes Storage							
Administrative Requirements							

Job Hazard Analysis (J.H.A.)

Execution/*Durchführung*

Catagory /Job Task	Questions to ask / *Prueffragen*
Receiving Batteries (includes storage)	Are mechanical lifting devices available for use? Has training been provided for mechanical lifting device use? Is the shelving acid resistant Is acid resistant storage basins available for leaking batteries? Is neutralizing agent available? Is acid/alkaline resistant gloves, apron and boots available? Are chemical splash proof goggles and a face shield available? Have personnel been trained to don/doff and use PPE correctly. Is a plumbed eye wash and shower available? Is the eye wash and shower tested monthly? Is the Admin areas separated from the rest of the battery operations?

Questions To Ask

Job Hazard Analysis (J.H.A.)

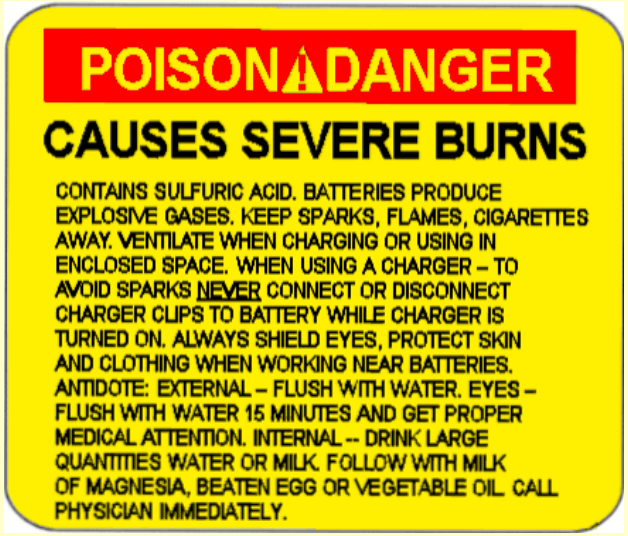
Execution/*Durchführung*

HOW DO I KNOW WHICH QUESTIONS TO ASK?

Do any of the 4 hazard categories exist?

Chemical	Physical	Biological	Ergonomic

SOPs
Manufactures Information
Warning signs, MSDSs
Technical Manuals
Previous Safety Inspection


POISON DANGER
CAUSES SEVERE BURNS
CONTAINS SULFURIC ACID. BATTERIES PRODUCE EXPLOSIVE GASES. KEEP SPARKS, FLAMES, CIGARETTES AWAY. VENTILATE WHEN CHARGING OR USING IN ENCLOSED SPACE. WHEN USING A CHARGER – TO AVOID SPARKS NEVER CONNECT OR DISCONNECT CHARGER CLIPS TO BATTERY WHILE CHARGER IS TURNED ON. ALWAYS SHIELD EYES, PROTECT SKIN AND CLOTHING WHEN WORKING NEAR BATTERIES. ANTIDOTE: EXTERNAL – FLUSH WITH WATER. EYES – FLUSH WITH WATER 15 MINUTES AND GET PROPER MEDICAL ATTENTION. INTERNAL -- DRINK LARGE QUANTITIES WATER OR MILK. FOLLOW WITH MILK OF MAGNESIA, BEATEN EGG OR VEGETABLE OIL. CALL PHYSICIAN IMMEDIATELY.

Job Hazard Analysis (J.H.A.)

Execution/*Durchführung*

Catagory /Job Task	Questions to ask / *Prueffragen*
Receiving Batteries (includes storage)	Are mechanical lifting devices available for use? Has training been provided for mechanical lifting device use? Is the shelving acid resistant Is acid resistant storage basins available for leaking batteries? Is neutralizing agent av Is acid/alkaline resistant boots available? Are chemical splash pro shield available? Have personnel been tr use PPE correctly. Is a plumbed eye wash a Is the eye wash and sho Is the Admin areas sepa the battery operations?

Category/ Job Task	Questions to Ask/Pruffragen	Y	N	Hazards	Measures/ Massnahmen	Action by/ zu erledigen von	Until/bis
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Draining Batteries	Are mechanical lifting devices available for use? Has training been provided for mechanical lifting device use? Is the shelving acid resistant Is acid resistant storage basins available for leaking batteries? Is neutralizing agent available? Is acid/alkaline resistant gloves, apron and boots available? Are chemical splash proof goggles and a face shield available? Have personnel been trained to don/doff and use PPE correctly. Is a plumbed eye wash and shower available? Is the eye wash and shower tested monthly? Is the Admin areas separated from the rest of the battery operations?						
Charging Batteries	Is an acid resistant basin available to drain batteries? Is there neutralization/dilution chamber to ensure electrolyte is not poured in the sanitary or storm drain system ? Are mechanical lifting devices available for use?						

Job Hazard Analysis (J.H.A.)

Execution/*Durchführung*

Catagory / Job Task	Questions to ask / *Prueffragen*
Receiving Batteries (includes storage)	Are mechanical lifting devices available for use? Has training been provided for mechanical lifting device use? Is the shelving acid resistant? Is acid resistant storage basins available for leaking batteries? Is neutralizing agent available? Is acid/alkaline resistant gloves, apron and boots available? Are chemical splash proof goggles and a face shield available? Have personnel been trained to don/doff and use PPE correctly. Is a plumbed eye wash and shower available? Is the eye wash and shower tested monthly? Is the Admin areas separated from the rest of the

Job Hazard Analysis (J.H.A.)

Catagory /Job Task	Questions to ask / *Prueffragen*
Draining Batteries	**Is an acid resistant basin available to drain batteries?** **Is there neutralization/dilution chamber to ensure electrolyte is not poured in the sanitary or storm drain system ?** **Are mechanical lifting devices available for use?** **Have personnel been trained on proper lifting techniques?** **Is shelving acid resistant ?** **Is neutralizing agent available in case of spills?** **Have personnel been trained to cleanup spills?** **Is acid/alkaline resistant gloves, apron and boots available?** **Are chemical splash proof goggles and a face shield available?** **Have personnel been trained to don/doff and use PPE correctly.**

Job Hazard Analysis (J.H.A.)

Catagory /Job Task	Questions to ask / *Prueffragen*
Filling Batteries	Is shelving acid resistant ? Are mechanical lifting devices available for use? Have personnel been trained on proper lifting techniques? Is a filling siphon used to reduce spills? Is neutralizing agent available in case of spills? Have personnel been trained to cleanup spills? Is acid/alkaline resistant gloves, apron and boots available? Are chemical splash proof goggles and a face shield available? Have personnel been trained to don/doff and use PPE correctly. Is a plumbed eye wash and shower available? Is the eye wash and shower tested monthly? Other than Admin areas is the Battery shop restricted from unauthorized personnel?

Job Hazard Analysis (J.H.A.)

Catagory /Job Task	Questions to ask / *Prueffragen*
Charging Batteries	**Is battery charging performed outside?** **Are less then 5 batteries charged?** **Is dilution ventilation of 2 CFM per square foot of floor space?** **Is there 150 fpm of local exhaust over the top of the battery used?** **Has the ventilation been evaluated annually and are the reports on hand?** **Is the exhaust fan interlocked with the charger?** **Is the fan located outside the battery room, made of non sparking materials and exhausted to the outside?** **Are bilingual NO SMOKING/OPEN FLAME warning signs posted?** **Are fire extinguishers on hand and serviceable?** **Other than Admin areas is the Battery shop restricted from unauthorized personnel?**

Job Hazard Analysis (J.H.A.)

Call your local Industrial Hygienist o measure the ventilatio

Job Hazard Analysis (J.H.A.)

Catagory /Job Task	Questions to ask / *Prueffragen*
Issuing serviced filled batteries (includes storage)	Are mechanical lifting devices available for use? Has training been provided for mechanical lifting device use? Is shelving acid resistant ? Is acid resistant storage basins available for leaking batteries? Is neutralizing agent available? Is acid/alkaline resistant gloves, apron and boots available? Are chemical splash proof goggles and a face shield available? Have personnel been trained to don/doff and use PPE correctly. Is a plumbed eye wash and shower available? Is the eye wash and shower tested monthly? Is the Admin areas separated from the rest of the battery operations?

Job Hazard Analysis (J.H.A.)

Catagory /Job Task	Questions to ask / *Prueffragen*
Administrative Requirements	**Are Material Safety Data Sheets (MSDS) available?** **Are there updated written and approved SOPs available?** **Has HAZCOM training been provided to all employees?** **Do employees undergo medical examinations exposure to sulfuric acid?** **Do employees undergo medical examinations exposure to hydrogen?**

Job Hazard Analysis (J.H.A.)

Questions to ask / *Prueffragen (Recieving Batteries)*	Y	N
Are mechanical lifting devices available for use?	Y	
Has training been provided for mechanical lifting device use?	Y	
Is shelving acid resistant ?		N
Is acid resistant storage basins available for leaking batteries?	Y	
Is neutralizing agent available?	Y	
Is acid/alkaline resistant gloves, apron and boots available?	Y	
Are chemical splash proof goggles and a face shield available?		N
Have personnel been trained to don/doff and use PPE correctly.	Y	
Is a plumbed eye wash and shower available?		N
Is the eye wash and shower tested monthly?	Y	

Answer the Questions

YES
Or
NO

Job Hazard Analysis (J.H.A.)

Questions to ask / *Prueffragen* (Recieving Batteries)	Y	N
Are mechanical lifting devices available for use?	Y	
Has training been provided for mechanical lifting device use?	Y	
Is shelving acid resistant ?		N
Is acid resistant storage basins available for leaking batteries?	Y	
Is neutralizing agent available?	Y	
Is acid/alkaline resistant gloves, apron and boots available?	Y	
Are chemical splash proof goggles and a face shield available?		N
Have personnel been trained to don/doff and use PPE correctly.	Y	
Is a plumbed eye wash and shower available?		N
Is the eye wash and shower tested monthly?		
Is the Admin areas separated from the rest of the battery operations?	Y	

Category/ Job Task	Questions to Ask/Pruffragen	Y	N	Hazards	Measures/ Massnahmen	Action by/ zu erledigen von	Until/bis
Receiving Batteries (includes storage)	Are mechanical lifting devices available for use?	Y					
	Has training been provided for mechanical lifting device use?	Y					
	Is the shelving acid resistant		N				
	Are acid resistant storage basins available for leaking batteries?	Y					
	Is neutralizing agent available?						
	Is acid/alkaline resistant gloves, apron and boots available?		N				
	Are chemical splash proof goggles and a face shield available?						
	Have personnel been trained to don/doff and use PPE correctly.	Y					
	Is a plumbed eye wash and shower available?	Y					
	Is the eye wash and shower tested monthly?						
	Is the Admin areas separated from the rest of the battery operations?	Y					
Draining Batteries	Are mechanical lifting devices available for use?	Y					
	Has training been provided for mechanical lifting device use?		N				
	Is the shelving acid resistant						
	Are acid resistant storage basins available for leaking batteries?	Y					
	Is neutralizing agent available?						
	Is acid/alkaline resistant gloves, apron and boots available?		N				
	Are chemical splash proof goggles and a face shield available?	Y					
	Have personnel been trained to don/doff and use PPE correctly.	Y					
	Is a plumbed eye wash and shower available?	Y					
	Is the eye wash and shower tested monthly?	Y					
	Is the Admin areas separated from the rest of the battery operations?		N				
Charging Batteries	Is an acid resistant basin available to drain batteries?	Y					
	Is there neutralization/dilution chamber to ensure electrolyte is not poured in the sanitary or storm drain system ?	Y					
	Are mechanical lifting devices available for use?	Y					

Job Hazard Analysis (J.H.A.)

Questions to ask / *Prueffragen* (Draining Batteries)	Y	N
Is an acid resistant basin available to drain batteries?	Y	
Is there neutralization/dilution chamber to ensure electrolyte is not poured in the sanitary or storm drain system ?	Y	
Are mechanical lifting devices available for use?		N
Have personnel been trained on proper lifting techniques?	Y	
Is shelving acid resistant ?	Y	
Is neutralizing agent available in case of spills?	Y	
Have personnel been trained to cleanup spills?		N
Is acid/alkaline resistant gloves, apron and boots available?	Y	
Are chemical splash proof goggles and a face shield available?		N
Have personnel been trained to don/doff and use PPE correctly.	Y	
Is a plumbed eye wash and shower available?		
Is the eye wash and shower tested monthly?		

Job Hazard Analysis (J.H.A.)

Questions to ask / *Prueffragen* (Filling Batteries)	Y	N
Is shelving acid resistant ?	Y	
Are mechanical lifting devices available for use?	Y	
Have personnel been trained on proper lifting techniques?	Y	
		N
Is a filling siphon used to reduce spills?	Y	
Is neutralizing agent available in case of spills?	Y	
Have personnel been trained to cleanup spills?	Y	
Is acid/alkaline resistant gloves, apron and boots available?		N
	Y	
Are chemical splash proof goggles and a face shield available?	Y	
		N
Have personnel been trained to don/doff and use PPE correctly?	Y	
Is a plumbed eye wash and shower available?		
Is the eye wash and shower tested monthly?		
Other than Admin areas is the Battery shop restricted from unauthorized personnel?		

Job Hazard Analysis (J.H.A.)

Questions to ask / *Prueffragen* (Charging Batteries)	Y	N
Is battery charging performed outside?		N
Are less then 5 batteries charged?		N
Is dilution ventilation of 2 CFM per square foot of floor space?		N
Is there 150 fpm of local exhaust over the top of the battery used?	Y	
Has the ventilation been evaluated annually and are the reports on hand?		N
Is the exhaust fan interlocked with the charger?	Y	
Is the fan located outside the battery room, made of non sparking materials and exhausted to the outside?	Y	N
Are bilingual NO SMOKING/OPEN FLAME warning signs posted?	Y	
Are fire extinguishers on hand and serviceable?	Y	
Other than Admin areas is the Battery shop		

Job Hazard Analysis (J.H.A.)

Questions to ask / *Prueffragen* (Administrative Requirements)	Y	N
Are Material Safety Data Sheets (MSDS) available?	Y	
Are there updated written and approved SOPs available?	Y	
Has HAZCOM training been provided to all employees?	Y	
Do employees undergo medical examinations exposure to sulfuric acid?		N
Do employees undergo medical examinations exposure to hydrogen?		N

Job Hazard Analysis (J.H.A.)

Execution
Durchführung

Any question you answered NO to:

Identify the Hazard

Identify the Control/Corrective

Development/Determination of Action *Maßnahmenentwicklung*

Job Hazard Analysis (J.H.A.)

Y	N	Hazards (Receiving Batteries)	Measures / Massnahmen
Y			
Y			
	N	Acid will deteriorate shelves and cause them to collapse	Inspect shelves weekly until acid resistant shelves are installed
Y			
Y			
Y			
	N	Sulfuric acid may be splashed in eye or face	Replace impact goggles with chemical resistant goggles
Y			
Y		Acid burns in eyes or on body.	
	N	Eye wash/shower outlets could be clogged with minerals and will not work during and emergency	Post a weekly inspection sheet. Inspect eyewash and shower the first day of each work week.

Job Hazard Analysis (J.H.A.)

Y	N	Hazards (Receiving Batteries)	Measures / Massnahmen
Y			
Y			
	N	Acid will deteriorate shelves and cause them to collapse	Inspect shelves weekly until acid resistant shelves are installed
N		minerals and will not work during and emergency	first day of each work week.

Category/ Job Task	Questions to Ask/Pruffragen	Y	N	Hazards	Measures/ Massnahmen	Action by/ zu erledigen von	Until/bis
Receiving Batteries (includes storage)	Are mechanical lifting devices available for use?	Y					
	Has training been provided for mechanical lifting device use?	Y			Inspect shelves weekly until		
	Is the shelving acid resistant		N	Acid will deteriorate shelves	acid resistant shelves are		
	Are acid resistant storage basins available for leaking batteries?	Y		and cause them to collapse	installed		
	Is neutralizing agent available?	Y					
	Is acid/alkaline resistant gloves, apron and boots available?	Y		Sulfuric acid may be	Replace impact goggles		
	Are chemical splash proof goggles and a face shield available?		N	splashed in eye or face	with chemical resistant		
	Have personnel been trained to don/doff and use PPE correctly.				goggles		
	Is a plumbed eye wash and shower available?	Y					
	Is the eye wash and shower tested monthly?		N	Eye wash/shower outlets	Post a weekly inspection		
	Is the Admin areas separated from the rest of the battery	Y		could be clogged with	sheet. Inspect eyewash and		
	operations?			minerals and will not work	shower the first day of each		
				during and emergency	work week.		
Draining Batteries	Are mechanical lifting devices available for use?	Y		Ergonomic: Batteries are	Continue to teach		
	Has training been provided for mechanical lifting device use?		N	waist high and have to be	employees proper lifting		
	Is the shelving acid resistant			turned upside down to drain	and handling technique		
		Y					
	Are acid resistant storage basins available for leaking batteries?						
	Is neutralizing agent available?			Acid will deteriorate shelves	Inspect shelves weekly until		
	Is acid/alkaline resistant gloves, apron and boots available?		N	and cause them to collapse	acid resistant shelves are		
		Y			installed		
	Are chemical splash proof goggles and a face shield available?	Y		Sulfuric acid may be	Replace impact goggles		
	Have personnel been trained to don/doff and use PPE correctly.		N	splashed in eye or face	with chemical resistant		
	Is a plumbed eye wash and shower available?				goggles		
	Is the eye wash and shower tested monthly?			Eye wash/shower outlets	Post a weekly inspection		
	Is the Admin areas separated from the rest of the battery		N	could be clogged with	sheet. Inspect eyewash and		
	operations?			minerals and will not work	shower the first day of each		
				during and emergency	work week.		

Job Hazard Analysis (J.H.A.)

Y	N	Hazards (Draining Bateries)	Measures / Massnahmen
Y			
Y		Ergonomic: Batteries are waist high and have to be turned upside down to drain	Continue to teach employees proper lifting and handling technique
	N		
Y			
	N	Acid will deteriorate shelves and cause them to collapse	Inspect shelves weekly until acid resistant shelves are installed
Y			
Y			
	N	Sulfuric acid may be splashed in eye or face	Replace impact goggles with chemical resistant goggles
Y			
Y		Acid burns to eyes and body	
	N	Eye wash/shower outlets could be clogged with minerals and will not work during and	Post a weekly inspection sheet. Inspect eyewash and shower the first day of each work week.
Y			
Y			

Job Hazard Analysis (J.H.A.)

Y	N	Hazards (Filling Batteries)	Measures / Massnahmen
Y			
Y			
Y			
	N	Make shift nozzle spill acids; unnecessary clean up; acid burns	Order siphons designed for 6 hole batteries.
Y			
Y			
Y			
	N	Sulfuric acid may be splashed in eye or face	Replace impact goggles with chemical resistant goggles
Y			
	N	Eye wash/shower outlets could be clogged with minerals and will not work during and emergency	Post a weekly inspection sheet. Inspect eyewash and shower the first day of each work week.
Y			

Job Hazard Analysis (J.H.A.)

Y	N	Hazards (Charing Batteries)	Measures / Massnahmen
	N	Hydrogen gas, fire, explosion	Ventilation to control Hydrogen gas
	N	Hydrogen gas, fire , explosion	Ventilation to control Hydrogen gas
Y		Hydrogen gas, fire, explosion	Ventilation to control Hydrogen gas
Y	N	Ventilation should be measured at least annually to ensure required airflow	Request Industrial Hygiene to perform annual ventilation survey and keep report on hand
Y		is present; hydrogen gas, fire, explosion	
	N		
Y			Place work order for bilingual sign and post. Post paper sign until permanent sign is received.
Y		Hydrogen gas, fire explosion	

Job Hazard Analysis (J.H.A.)

Y	N	Hazards (Issuing Batteries)	Measures / Massnahmen
Y			
Y			
	N	Acid will deteriorate shelves and cause them to collapse	Inspect shelves weekly until acid resistant shelves are installed
Y			
Y			
Y			
	N	Sulfuric acid may be splashed in eye or face	Replace impact goggles with chemical resistant goggles
Y			
Y			
	N	Eye wash/shower outlets could be clogged with minerals and will not work during and emergency	Post a weekly inspection sheet. Inspect eyewash and shower the first day of each work week.
Y			

Job Hazard Analysis (J.H.A.)

Y	N	Hazards (Administrative Req)	Measures / Massnahmen
Y			
Y			
Y			
Y		Irritation of eyes, nose and throat; difficulty in breathing. Mist can cause teeth erosion, Burn skin; cause dermatitis	Contact Industrial Hygiene for to measure the sulfuric acid mist in the worksite. Contact Occupational Health Nurse for consultation
	N	Hydrogen gas, fire explosion	Contact Occupational Health Nurse

Job Hazard Analysis (J.H.A.)

Industrial Hygienist

Measuring sulfuric acid mist

During

“Battery Filling Operations”

Job Hazard Analysis (J.H.A.)

Development/Determination of Action *Maßnahmenentwicklung*

Assign Control/Corrective Measurements

Assign a Suspense

Job Hazard Analysis (J.H.A.)

Measures / Massnahmen (Recieving Batteries)	Action by / *zu erledigen von*	Until / *bis*
Inspect shelves weekly until acid resistant shelves are installed	Mr Schwarz Mr Green (order acid resistant shelves)	Inspection weekly until acid shelves are installed NLT 1 Nov 05
Replace impact goggles with chemical resistant goggles	Mr Green	20 Sep 05
Post a weekly inspection sheet. Inspect eyewash and shower the first day of each work week.	Mr Schwarz	Weekly

Job Hazard Analysis (J.H.A.)

Measures / Massnahmen (Recieving Batteries)

Action by / *zu erledigen von*

Until / *bis*

Inspect shelves weekly until acid resistant shelves are installed

Mr Schwarz

Inspection weekly until acid shelves are installed

Category/ Job Task	Questions to Ask/Pruffragen	Y	N	Hazards	Measures/ Massnahmen	Action by/ zu erledigen von	Until/bis
Receiving Batteries (includes storage)	Are mechanical lifting devices available for use?	Y				Mr Schwarz	Inspection weekly until acid shelves are installed NLT 1 Nov 05
	Has training been provided for mechanical lifting device use?	Y			Inspect shelves weekly until acid resistant shelves are installed		
	Is the shelving acid resistant		N	Acid will deteriorate shelves and cause them to collapse			
	Are acid resistant storage basins available for leaking batteries?	Y					
	Is neutralizing agent available?	Y					
	Is acid/alkaline resistant gloves, apron and boots available?	Y		Sulfuric acid may be splashed in eye or face	Replace impact goggles with chemical resistant goggles	Mr Green (order acid resistant shelves)	
	Are chemical splash proof goggles and a face shield available?		N				
	Have personnel been trained to don/doff and use PPE correctly.						
	Is a plumbed eye wash and shower available?	Y					
	Is the eye wash and shower tested monthly?		N	Eye wash/shower outlets could be clogged with minerals and will not work during and emergency	Post a weekly inspection sheet. Inspect eyewash and shower the first day of each work week.	Mr Green Mr Schwarz	20 Sep 05 Weekly
	Is the Admin areas separated from the rest of the battery operations?	Y					
Draining Batteries	Are mechanical lifting devices available for use?	Y				Mr Keller will coordinated Back and lifting class annually	Annually
	Has training been provided for mechanical lifting device use?		N	Ergonomic: Batteries are waist high and have to be turned upside down to drain	Continue to teach employees proper lifting and handling technique		
	Is the shelving acid resistant	Y					
	Are acid resistant storage basins available for leaking batteries?						
	Is neutralizing agent available?			Acid will deteriorate shelves and cause them to collapse	Inspect shelves weekly until acid resistant shelves are installed	Mr Schwarz	Inspection weekly until acid shelves are installed NLT 1 NOV 05
	Is acid/alkaline resistant gloves, apron and boots available?	Y	N				
	Are chemical splash proof goggles and a face shield available?	Y					
	Have personnel been trained to don/doff and use PPE correctly.		N	Sulfuric acid may be splashed in eye or face	Replace impact goggles with chemical resistant goggles	Mr Green (order acid resistant shelves)	
	Is a plumbed eye wash and shower available?						
	Is the eye wash and shower tested monthly?				Post a weekly inspection sheet. Inspect eyewash and shower the first day of each work week.	Mr Schwarz	20 Sep 05
	Is the Admin areas separated from the rest of the battery operations?		N	Eye wash/shower outlets could be clogged with minerals and will not work during and emergency			

each work week.

Job Hazard Analysis (J.H.A.)

Measures / Massnahmen (Draining Batteries)	Action by / *zu erledigen von*	Until / *bis*
Continue to teach employees proper lifting and handling technique	Mr Keller will coordinated Back and lifting class annually	Annually
Inspect shelves weekly until acid resistant shelves are installed	Mr Schwarz	Inspection weekly until acid shelves are installed NLT 1 NOV 05
Replace impact goggles with chemical resistant goggles	Mr Green (order acid resistant shelves)	20 Sep 05
Post a weekly inspection sheet. Inspect eyewash and	Mr Schwarz	Weekly

Job Hazard Analysis (J.H.A.)

Measures / Massnahmen (Filling Batteries)	Action by / *zu erledigen von*	Until / *bis*
Order siphons designed for 6 hole batteries.	Mr Green	1 Oct 05
Replace impact goggles with chemical resistant goggles	Mr Green	20 Sep 05
Post a weekly inspection sheet. Inspect eyewash and shower the first day of each work week.	Mr Schwarz	Weekly

Job Hazard Analysis (J.H.A.)

Measures / Massnahmen (Charging Batteries)	Action by / *zu erledigen von*	Until / *bis*
Specific ventilation requirements when charging batteries indoors	SEE BELOW	
Request Industrial Hygiene to perform annual ventilation survey and keep report on hand	Mr Keller will coordinate with Industrial Hygiene to measure ventilation annually	Contact IH immediately and annually there after
	Mr Schwarz (temporary sign)	20 Sep 05
Place work order for bilingual sign and post. Post paper sign until	Mr Keller (Order permanent sign)	1OCt 05

Job Hazard Analysis (J.H.A.)

Measures / Massnahmen Issuing Batteries)	Action by / *zu erledigen von*	Until / *bis*
Inspect shelves weekly until acid resistant shelves are installed	Mr Schwarz Mr Green (order acid resistant shelves)	Inspection weekly until acid shelves are installed NLT 1 NOV 05
Replace impact goggles with chemical resistant goggles	Mr Green	20 Sep 05
Post a weekly inspection sheet. Inspect eyewash and shower the first day of each work week.	Mr Schwarz	Weekly

Job Hazard Analysis (J.H.A.)

Measures / Massnahmen	Action by / *zu erledigen von*	Until / *bis*
Contact IH to measure exposures to acid mist and contact Occupational Health Nurse for consultation	Mr Keller	20 Sep 05
Contact Occupational Health Nurse	Mr Keller	20 Sep 05

Job Hazard Analysis (J.H.A.)

Evaluation

Determine if control/corrective measures ar

Follow up on the actions and their suspense

May need to execute a new JHA due to:

Change in Technology
Change in Work Procedures
New Purchase of Equipment
Routine

JHA Type: Check appropriate box	
☐	Initial
☐	Routine
☐	Change Art of Technology
☐	New purchase of Equipment
☐	Work Procedure Change

Job Hazard Analysis (J.H.A.)

Documentation
Dokumentation

Document all JHA and supporting documents:

JHA, SOPs
Technical manuals
Manufacture's Information
OHN Visits
IH Reports
Safety Inspections
Updated JHA

Category/ Job Task	Questions to Ask/Pruffragen	Y	N	Hazards	Measures/ Massnahmen	Action by/ zu erledigen von	Until/b is
Receiving Batteries (includes storage)	Are mechanical lifting devices available for use?	Y				Mr Schwarz	Inspectio n weekly until acid shelves are installed NLT 1 Nov 05
	Has training been provided for mechanical lifting device use?	Y					
	Is the shelving acid resistant		N	Acid will deteriorate shelves and cause them to collapse	Inspect shelves weekly until acid resistant shelves are installed		
	Are acid resistant storage basins available for leaking batteries?	Y					
	Is neutralizing agent available?	Y					
	Is acid/alkaline resistant gloves, apron and boots available?	Y		Sulfuric acid may be splashed in eye or face	Replace impact goggles with chemical resistant goggles	Mr Green (order acid resistant shelves)	
	Are chemical splash proof goggles and a face shield available?		N				
	Have personnel been trained to don/doff and use PPE correctly.						
	Is a plumbed eye wash and shower available?	Y					
	Is the eye wash and shower tested monthly?		N	Eye wash/shower outlets could be clogged with minerals and will not work during and emergency	Post a weekly inspection sheet. Inspect eyewash and shower the first day of each work week.	Mr Green Mr Schwarz	20 Sep 05 Weekly
	Is the Admin areas separated from the rest of the battery operations?	Y					
Draining Batteries	Are mechanical lifting devices available for use?	Y				Mr Keller will coordinated Back and lifting class annually	Annually
	Has training been provided for mechanical lifting device use?		N	Ergonomic: Batteries are waist high and have to be turned upside down to drain	Continue to teach employees proper lifting and handling technique		
	Is the shelving acid resistant						
	Are acid resistant storage basins available for leaking batteries?	Y					
	Is neutralizing agent available?			Acid will deteriorate shelves and cause them to collapse	Inspect shelves weekly until acid resistant shelves are installed	Mr Schwarz	Inspectio n weekly until acid shelves are installed NLT 1 NOV 05
	Is acid/alkaline resistant gloves, apron and boots available?		N				
	Are chemical splash proof goggles and a face shield available?	Y					
	Have personnel been trained to don/doff and use PPE correctly.	Y					
	Is a plumbed eye wash and shower available?		N	Sulfuric acid may be splashed in eye or face	Replace impact goggles with chemical resistant goggles	Mr Green (order acid resistant shelves)	
	Is the eye wash and shower tested monthly?						
	Is the Admin areas separated from the rest of the battery operations?		N	Eye wash/shower outlets could be clogged with minerals and will not work during and emergency	Post a weekly inspection sheet. Inspect eyewash and shower the first day of each work week.	Mr Schwarz	20 Sep 05

Job Hazard Analysis (J.H.A)

1st Step **Determine Work Areas – Work Activities Perform**

Arbeitsbereiche festlegen. Welche Tätigkeiten werden ausgeführt?

2nd Step : Identify Hazards – What may result in hazards?

Gefährdungen ermitteln. Was kann zu Gefährdungen fü

3rd Step : Determine Protective Goals. Whats my goal to ach

Schutzziele festlegen. Was will ich eigentlich erreichen?

4th Step : Specify Protecty Measures to be taken? What to d

External Advise, Where do I need it

Maßnahmen festlegen. Was ist zu tun? Wer macht was? B wann? Externe Beratung festlegen. Wo ist sie erforderli

5th Step: Examine Measures for effectiveness.

Maßnahmen auf Wirksamkeit überprüfen.

ank you for your attenti

BREAK/PAUSE

Danke für Ihre Aufmerksamkeit !!